

**TOTAL ENVIRONMENTAL  
RESTORATION CONTRACTS**  
A SUCCESS STORY

# KIRTLAND AIR FORCE BASE

## TERC WORKS



*Crushing of wood stumps for use as clean fill.*

**T**he Omaha District of the U.S. Army Corps of Engineers tasked its TERC contractor, Foster Wheeler Environmental Corporation, to accomplish environmental cleanup at Kirtland AFB, located on the southeast side of Albuquerque, New Mexico, beside the international airport. The flexible “cradle to grave” TERC approach was deemed most appropriate to address the variety of Resource Conservation and Recovery Act (RCRA) facility investigations (RFIs), interim corrective measures (ICMs), corrective actions, risk assessments, and a corrective measures study.

The contractor conducted RFIs at the 14 highest-risk sites. Field investigation activities included aerial photograph reviews; installation of groundwater monitoring wells; soil borings; geophysical, soil gas, and unexploded ordnance surveys; and sediment, surface water, and geotechnical sampling. Changes in work scope, labor, and equipment availability, operating facility schedules, and sample/analysis management made coordination of these efforts very difficult. The TERC team kept the overall project on schedule



TERC concept met RCRA cleanup requirements.

by facilitating and maintaining close communication and coordination among team members.

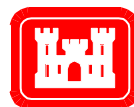
To assess groundwater impacts, the contractor used air rotary drilling to install wells up to 400 feet deep at several locations. Even though equip-

ment breakdowns caused delays, the contractor stayed on schedule and within the budget by reallocating resources and making progress on other concurrently scheduled work.

The TERC team saved \$175,000 by combining investigative activities and using the innovative air rotary drilling technique, which minimized the generation of waste and reduced anticipated waste disposal costs. These savings were used to conduct preliminary ecological risk screenings and a solid waste management unit assessment; to support development of a management action plan and a long-term groundwater monitoring program; and to perform other RCRA requirements, including planning and management support for an ICM.

Flexible, innovative TERC approach saved \$175,000.

The ICM was completed in only 3 months — from issuance of the task order to final project reporting. To meet this tight schedule and minimize costs, the contractor sheared and crushed huge wood stumps and concrete rubble previously left on a landfill and used it to fill in other on-base locations. Using the crushed debris as fill eliminated the need to import clean fill and enabled the contractor to stay within budget even though the actual debris volume exceeded original estimates by 50 percent. This innovative approach generated an estimated cost avoidance savings of \$45,000.



#### OMAHA DISTRICT

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